

THREE RECENT RECORDS OF PIED CORMORANT (*PHALACROCORAX VARIUS*) PREDATION ON SILVER GULL CHICKS (*LARUS NOVAEHOLLANDIAE*) IN WESTERN AUSTRALIA

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ABSTRACT

Pied Cormorants (*Phalacrocorax varius*) have been recorded throughout coastal areas and inland waters of Australia eating a variety of fish and a few crustacean species using pursuit-diving. This paper records three isolated events where Pied Cormorants were observed eating live Silver Gull (*Larus novaehollandiae*) chicks or attempting to remove chicks from gull nests on Penguin Island, Western Australia.

INTRODUCTION

Penguin Island is a coastal limestone island situated 42 kilometres south-west of Perth, W.A., and 600m west of Mersey Point in Shoalwater Bay, Shire of Rockingham (Dunlop *et al.* 1988). Pied Cormorants roost on the eastern side of the northern most point of the island between February and July. Silver Gulls nest on the southern and northern plateau of Penguin Island. Laying usually begins in late March, early April and continues until November. Their laying pattern is consistently trimodal with peaks in autumn (April), winter (June) and spring (August–September). The main laying peaks are followed by a pronounced trough in newly

initiated clutches (Dunlop 1986), with peaks becoming progressively less synchronised throughout the protracted season (Wooller and Dunlop 1979). There is a pronounced peak in fledglings in early June (Dunlop *et al.* 1988).

Pied Cormorants are underwater pursuit-divers that use their feet to reach the bottom where they search for their prey (Schreiber and Clapp 1987). At various sites within Western Australia, Victoria, South Australia and New Zealand, Pied Cormorants have been reported eating a variety of fish and crustacean species all taken by diving, using their feet for propulsion (for review see Marchant and Higgins 1990). A Western Australian study found the feeding pattern of three

common cormorant species, the Little Pied (*P. melanoleucos*), Little Black (*P. sulcirostris*) and the Pied Cormorant to be opportunistic but restricted to a variety of slow-swimming benthic-feeding fish and crustaceans (Trayler *et al.* 1989). An early paper (Storr 1965), on the birds of Rottneest Island in Western Australia reported the possibility of Pied Cormorants taking the ducklings of the Australian Shelduck (*Tadorna tadornoides*), although this was not actually observed.

OBSERVATIONS

Record No. 1

On 25 May 2000, a single Pied Cormorant was seen walking into the Silver Gull breeding colony on the southern plateau of Penguin Island. It approached a nest within 10m of the rocks where it had previously perched and removed a single gull chick. The cormorant held the chick in its beak while it moved about 2m away from the nest, then swallowed the chick whole. This action was repeated with a second chick from the same nest. The cormorant then flew away from the area. During the cormorant's attack, only nearby gulls attempted to defend their nests, using aerial dive-bombing and vocalisations.

Record No. 2

On 30 May 2000, a single Pied Cormorant entered the gull colony on the southern plateau of the island. As it walked amongst the nests, several attempts were

made to take chicks by reaching into the gull's nests. Defence by the gulls was apparently too strong on this occasion and the cormorant flew from the colony without success. Again, only those gulls from directly adjacent nests attempted any form of defence against the cormorant.

Record No. 3

On 28 September 2000, a Pied Cormorant was observed flying over the gull colony at the northern end of the southern plateau. The cormorant made several low passes before landing and removing a gull chick. The chick was held in the cormorant's beak while it flew over the water and was then swallowed whole once the cormorant had landed on the water. The gulls responded by aerial attacks on the cormorant, continuing while the cormorant flew over the water and only ceased once the chick was eaten. The gulls appeared to be making attempts to snatch the chick off the cormorant in the same way that they would attack another gull carrying a large piece of food.

In the past, Pied Cormorants have been observed roosting on Penguin Island and approximately 400–500 pairs have nested on Shag Rock, 600m north of the island (Dunlop *et al.* 1988). Although no recent estimates of population size have been made, cormorants have been recorded nesting and successfully raising chicks on Penguin Island since at least 1999 (personal observation). The breeding season of the Pied Cormorant in this region extends

from February to July, coinciding with the first two observations of predation on gull chicks during May. The third observation, in September, did not however coincide with the cormorant's breeding season.

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